Remarks/Arguments

Claims 1-24 are pending. Claims 1 and 10 have been amended. The amendment to claim 1 was merely to correct a typographical error. Reconsideration of this application in light of the above amendments and following remarks is requested.

Failure to reject each claim element

Applicant requests that the Examiner withdraw the finality of the current Office action on the following grounds. Applicant submits that the Office action fails to present the Examiner's conclusions under 35 U.S.C. §§ 102 and/or 103 regarding the element rejected under 35 U.S.C. § 112.

According to MPEP § 2163, "[t]hese Guidelines are intended to form part of the normal examination process. Thus, where Office personnel establish a prima facie case of lack of written description for a claim, a thorough review of the prior art and examination on the merits for compliance with the other statutory requirements, including those of 35 U.S.C. 101, 102, 103, and 112, is to be conducted prior to completing an Office action which includes a rejection for lack of written description. " Furthermore, MPEP § 2163 (III) states that, regardless of the outcome of the written description determination, "Office personnel must complete the patentability determination under all the relevant statutory provisions of title 35 of the U.S. Code. Once Office personnel have concluded analysis of the claimed invention under all the statutory provisions, including 35 U.S.C. 101, 112, 102, and 103, they should review all the proposed rejections and their bases to confirm their correctness. Only then should any rejection be imposed in an Office action. The Office action should clearly communicate the findings, conclusions, and reasons which support them."

Although Applicant traverses the rejection under 35 U.S.C. § 112, first paragraph, Applicant submits that the Office action fails to present the Examiner's conclusions under 35 U.S.C. §§ 101, 102, or 103. Accordingly, unless claim 1 is deemed allowable by the Examiner, Applicant respectfully requests that the finality of the current Office action be withdrawn and any rejections of claim 1 (other than the 35

U.S.C. § 112 rejection discussed below) be presented so that Applicant can address such rejections.

Rejections under 35 U.S.C. § 112

Claims 1-9 stand rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. Applicant respectfully traverses this rejection, and submits that the element of claim 1 reciting "ordering a first node not on the list of surviving nodes to halt execution by writing, by a second node on the list of surviving nodes, a termination message into the slot associated with the first node" is supported by the specification as follows.

Applicant's specification recites "[t]he extNodeState field is used by other nodes to issue a command to this node. Currently a poison pill command is issued through this mechanism." (page. 14, lines 26 and 27). The specification also states that "[a] command (poison pill) is issued to halt execution (extNodeState = eat poison pill command) by a first node for all other nodes who are not in the first node's partition or membership list and have not updated their membership (my groupEpoch is greater than the others groupEpoch)." (page 15, lines 12-15). Applicant submits that the cited text clearly supports the element of claim 1 of "ordering a first node not on the list of surviving nodes to halt execution by writing, by a second node on the list of surviving nodes, a termination message into the slot associated with the first node."

The Office action (on page 8, para. 8) states that the above element of claim 1 contradicts other language of the specification reciting "[n]odes are also allowed to read/write their own slot but can only read slots allocated to other nodes" (citing page 13, lines 17 and 18 of the specification). However, Applicant notes that the language cited by the Examiner refers to one embodiment (see page 13, line 4), while the language cited by Applicant in support of the claim element is described with respect to another embodiment (see page 14, line 8). The embodiment cited by Applicant specifically provides a node field to which other nodes can write, as recited in the cited element of claim 1. Accordingly, Applicant submits that the specification clearly

supports the cited element of claim 1 without contradiction, and requests that the rejection under 35 U.S.C. § 112, first paragraph, be withdrawn.

Rejections under 35 U.S.C. § 102(e)

Claims 1-24 stand rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,363,495 to MacKenzie et al. ("MacKenzie"). As the PTO provides in MPEP § 2131, "[t]o anticipate a claim, the reference must teach every element of the claim...." (emphasis added). Therefore, the MacKenzie patent must disclose all of the elements of the claims to sustain the rejection. Accordingly, Applicant respectfully traverses this rejection on the following grounds.

Claims 1-9

Claim 1 recites, in part, ordering a first node not on the list of surviving nodes to halt execution by writing, by a second node on the list of surviving nodes, a termination message into the slot associated with the first node.

As stated previously, other than rejecting this element under 35 U.S.C. § 112 (which is addressed above), the Office action fails to address this limitation as required by MPEP § 2163. In addition, Applicant can find no teaching or suggestion of this element of claim 1 required by MPEP § 2131. For example, MacKenzie states that "[d]uring cluster initialization, one node will write each of these blocks to a designated area of the shared disk. At all other times, a node only writes its own NIB." (col. 9, lines 34-37) (emphasis added). Accordingly, claim 1 is allowable over the cited reference. Claims 2-9 depend from and further limit claim 1 and therefore are allowable for at least the same reason as claim 1.

Claims 10-17

Claim 10, as amended, recites in part instructions for dividing the scratch pad into a plurality of slots, each slot associated with one of a plurality of nodes within the cluster of computers, wherein each slot includes at least a heartbeat field indicating that

cluster software is loaded on the node and a node state field indicating a current state of the node, wherein the current state identifies the node as being dead, alive, or preparing to shut down.

Applicant has reviewed the text (col. 8, line 28 – col. 9, line 44) cited by the Office action with respect to the above element of claim 10. However, the cited text fails to recite a node state field indicating a current state of the node, wherein the current state identifies the node as being dead, alive, or preparing to shut down. Accordingly, MacKenzie fails to teach or suggest each element of claim 10 as required by MPEP § 2131, and claim 10 is allowable over the cited reference. Claims 11-17 depend from and further limit claim 10 and therefore are allowable for at least the same reason as claim 10.

Claims 18-24

Claim 18 recites, in part, shutting down each node not on the list of surviving nodes by requiring each node not on the list of surviving nodes to write a special message in a respective slot for that node and then shut down immediately.

Applicant has carefully reviewed the Examiner's rejection of the above element of claim 18, which is based upon Fig. 14C; col. 19, lines 24-27, lines 54-60, and lines 38-52; and col 20, lines 14-18. In particular, the Office action states with respect to Fig. 14C that "[e]vidently, node two in this Figure is partitioned and wrote a "special message in the respective slot indicating the status which then shuts down, because node 2 is not part of the surviving nodes." (Office action, page 10) (emphasis original). However, Applicant directs the Examiner's attention to the text of MacKenzie, which states that "[i]n FIG. 14C, when node 2 1406 leaves, data in NIB 1416 becomes old data and the heartbeat has stopped, which is indicated by an absence in a change in the timestamp." (col. 18, lines 24-29) (emphasis added). Accordingly, Fig. 14C is not illustrating that the node has written a message prior to leaving, but is instead illustrating that the node is no longer updating the timestamp.

Furthermore, the cited text of col. 20, lines 14-18, recites "a plurality of data

structures, wherein each of the plurality of data structures is associated with a computer within the plurality of computers, wherein the plurality of computers periodically update the data structures to reflect membership in the clustered computer system." Nowhere does this text teach requiring each node not on the list of surviving nodes to <u>write a special message</u> in a respective slot for that node and then shut down immediately.

For at least this reason, Applicant submits that MacKenzie fails to teach or suggest each element of claim 18 as required by MPEP § 2131, and that claim 18 is allowable over the cited reference. Claims 19-24 depend from and further limit claim 18 and therefore are allowable for at least the same reason as claim 18.

<div align="center"><u>Conclusion</u></div>

Accordingly, Applicant respectfully submits that independent claims 1, 10, and 18 are in condition for allowance. Dependent claims 2-9, 11-17, and 19-24 depend from and further limit their respective independent claims and are also in condition for allowance. Should the Examiner have any further comments, the Examiner is invited to contact the Applicant at the below listed number.

Respectfully submitted,

Timothy F. Bliss
Registration No. 50,925

Dated: January 17, 2005
HAYNES AND BOONE, LLP
901 Main Street, Suite 3100
Dallas, Texas 75202-3789
Telephone: 972/739-8638
File: 26530.60
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I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on January 17, 2005.

Gayle Conner